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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/966,095	10/01/2001	Francois Balay	Balay 2-1	4702

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EXAMINER

DANG, KHANH NMN

ART UNIT PAPER NUMBER

2111

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	09/966,095		BALAY ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Khanh Dang		2111	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 06 July 2004.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-8, 10-12, 14-17, 19-21 and 23-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                         |                                                                             |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                                |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____                                                             | 6) <input type="checkbox"/> Other: _____                                    |

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## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3, 5-8, 10-12, 14-17, 19-21, and 23-26 rejected under 35

U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The terms "common back plane" and "common backplane means" do not have adequate support from the originally filed specification.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an

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application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 6, 8, 10-12, 15, 17, 19-21, 24, and 26 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura.

As broadly drafted, these claims do not define any structure that differs from Nakamura.

With regard to claims 1-3, Nakamura discloses a system for interconnecting two or more computer bus architectures, comprising: a first bus segment (PCI primary 2) to transmit data information; a first half bridge circuit (15) connected to the first bus segment (2); a second bus segment (PCI secondary 4) to transmit data information; a second half bridge circuit (35) connected to the first half bridge circuit (15) and the second bus segment (4) for transferring data information between the first half bridge circuit (15) and the second bus segment (4). Further, in Nakamura, the backplane defining the serial transfer path (300) is readable as a so-called "common back plane."

With regard to claim 6, in Nakamura, the PCI clock signals 1 and 2 have the same frequency and are generated by independent clock signal oscillators.

With regard to claim 8, in Nakamura, the bus interface of the first half bridge circuit (15) and the bus interface of the second half bridge circuit (35) recover a clock signal from, respectively the first bus segment (2) and the second bus segment (4). See at least claims 1 and 14.

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With regard to claims 10-12, 15, 17, and 18, it is clear that one using the system of Nakamura would have performed the same steps set forth in claims 10-13, 15, 17, and 18.

With regard to claims 19-21, 24, and 26, see explanation above regarding to claims 1-3, 6, and 8.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 10-12, 14, 19-21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lange et al.

With regard to claims 1-3, Lange discloses a system for interconnecting two or more computer bus architectures, comprising: a first bus segment (primary PCI 12) to transmit data information; a first half bridge circuit (126) connected to the first bus segment (12); a second bus segment (secondary PCI 14) to transmit data information; a second half bridge circuit (127) connected to the first half bridge circuit (126) and the second bus segment (14) for transferring data information between the first half bridge circuit (126) and the second bus segment (14). With regard to claims 10-12, 14, 18, it is clear that one using the

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system of Lange would have performed the same steps set forth in claims 10-14 and 18. With regard to claims 19-21, and 23, see explanation above regarding to claims 1-3. In addition, Lange et al. also discloses that the first half bridge segment (12) and the second half bridge segment (14) communicate with a high speed serial line protocol (see at least col. 5, lines 49-51).

Lange et al. does not disclose the use of a serial signal such as the LVDS (low voltage differential signal).

However, LVDS is old and well-known in the art as evidenced by at least Nakamura.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a particular serial signal line such as the LVDS for the serial line of Lange, since LVDS is old and well-known as evidenced by at least Nakamura; and using the same for the serial control line of Lange only involves ordinary skill in the art.

Claims 6, 15, and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lange et al., as applied to claims 1-3, 10-12, 14, 19-21, and 23, and further in view of the following.

Lange et al., as discussed above, discloses the claimed invention. Lange et al. does not disclose that the bus operating frequencies of PCI bus (2) and PCI bus (4) may be substantially the same. However, the use of two PCI buses having substantially same frequencies is old and well-known evidenced by at least Nakamura. It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to use two PCI buses having substantially same frequencies, since the Examiner takes Official Notice that the use of two PCI buses having substantially same frequencies is old and well-known, and providing Lange et al. with two PCI buses having substantially same frequencies only involves ordinary skill in the art.

Claims 7, 16, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lange et al., as applied to claims 1-3, 10-12, 14, 19-21, and 23, and further in view of the following.

Lange et al., as discussed above, discloses the claimed invention. Lange et al. does not disclose the use of "field programmable" or FPSC for the PCI half bridges (15) and (35). However, the use FPSC for PCI half bridge is old and well-known evidenced by the acknowledged prior art, Lattice Semiconductor Corp., and Lucent Technologies (cited under "relevant art"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use FPSC for PCI half bridge, since the Examiner takes Official Notice that the use of FPSC for PCI half bridge is old and well-known, and using FPSC for PCI bridges of Lange et al. only involves ordinary skill in the art.

Claims 5, 14, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura.

Nakamura, as discussed above, discloses the claimed invention. Nakamura does not disclose that the bus operating frequencies of PCI bus (2)

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and PCI bus (4) may be different. However, the use of two PCI buses having different frequencies is old and well-known evidenced by at least Lange et al. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use two PCI buses having different frequencies, since the Examiner takes Official Notice that the use of two PCI buses having different frequencies is old and well-known, and providing Nakamura with two PCI buses having different frequencies only involves ordinary skill in the art.

Claims 7, 16, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nakamura.

Nakamura, as discussed above, discloses the claimed invention.

Nakamura does not disclose the use of "field programmable" or FPSC for the PCI half bridges (15) and (35). However, the use FPSC for PCI half bridge is old and well-known evidenced by the acknowledged prior art, Lattice Semiconductor Corp., and Lucent Technologies (cited under "relevant art"). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use FPSC for PCI half bridge, since the Examiner takes Official Notice that the use of FPSC for PCI half bridge is old and well-known, and using FPSC for PCI bridges of Nakamura only involves ordinary skill in the art.

### ***Response to Arguments***

Applicants' arguments filed 7/6/2004 have been fully considered but they are not persuasive.



At the outset, Applicants are reminded that claims subject to examination will be given their broadest reasonable interpretation consistent with the specification. *In re Morris*, 127 F.3d 1048, 1054-55 (Fed. Cir. 1997). In fact, the “examiner has the duty of police claim language by giving it the broadest reasonable interpretation.” *Springs Window Fashions LP v. Novo Industries, L.P.*, 65 USPQ2d 1862, 1830, (Fed. Cir. 2003). Applicants are also reminded that claimed subject matter not the specification, is the measure of the invention. Disclosure contained in the specification cannot be read into the claims for the purpose of avoiding the prior art. *In re Sporck*, 55 CCPA 743, 386 F.2d, 155 USPQ 687 (1986).

With this in mind, the discussion will focus on how the terms and relationships thereof in the claims are met by the references. Response to any limitations that are not in the claims or any arguments that are irrelevant and/or do not relate to any specific claim language will not be warranted.

**The Lange 102 Reference:**

Applicants argue that Lange does not disclose the use of LVDS.

Applicants' argument is moot in view of the new ground of rejection.

**The Nakamura 102 Rejection:**

Applicants argue that Nakamura does not disclose the use of a so-called “common backplane.” Contrary to Applicants' argument, in Nakamura, the “backplane” defining the serial transfer path (300) is readable as a so-called

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"common back plane." Applicants also argue that Nakamura does not disclose the use of LVDS. Contrary to Applicants' argument, Nakamura does disclose the use of LVDS. See Nakamura, at least column 5, lines 1-16.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Khanh Dang at telephone number 703-308-0211.



Khanh Dang  
Primary Examiner